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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/064,977 | 09/05/2002 | Shinichi Sato | PC 2200.01US | 9021 |
| 33379 | 7590 | 12/06/2004 | EXAMINER | |
| DVA/PIONEER INDUSTRIAL COMPONENTS, INC. 2355 MAIN STREET SUITE 200 IRVINE, CA 92614 | | | PENDLETON, BRIAN T | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2644 | |

DATE MAILED: 12/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/064,977

Applicant(s)

SATO, SHINICHI

Examiner

Brian T. Pendleton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 September 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 9, 14, 15, 25 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee, US Patent Application Publication 2003/0021433. Lee discloses a speaker configuration for a vehicle comprising first and second speakers 22, 23 which are disposed in the center section of a dashboard. First speaker 22 is oriented toward a left edge of the dashboard while second speaker 23 is oriented toward a right edge of the dashboard. Claims 1, 9 and 25 are met. Per claims 2, 3, 14, 15, and 26 speakers 32b and 33b are tweeters in figure 6.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Fincham, US Patent Application Publication 2003/0219137. Lee does not disclose that the first and second speakers are juxtaposed. Fincham discloses a vehicle sound system

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comprising speaker box 112 having a pair of speakers 114, 115. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Lee to juxtapose the speakers in a speaker, as taught by Fincham, for the purpose of providing a speaker apparatus that can be used irrespective of the vehicle in which it is placed.

Claims 5-8, 10, 11, 13, 16-19 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Takagi et al, US Patent 5,031,220. Lee does not disclose explicitly that the first and second speakers are flush with the upper surface of the dashboard. Takagi et al disclose a mobile stereo speaker set comprising speakers 21L, 21R and 22. As illustrated in figure 1, the speakers are flush with the upper surface of dashboard 12. It would have been obvious to one of ordinary skill in the art at the time of invention to install the speakers of Lee flush with the dashboard, as taught by Takagi, for the express purpose of not obstructing the view of the driver and car occupants as would speakers placed on top of the dashboard would do. Claims 5 and 16 are met. As to claims 6, 13 and 27, Takagi shows that the speaker 22 is in close proximity to the windshield. It would have been obvious to one of ordinary skill in the art at the time of invention to position the speaker there for the purpose of enhancing the ambience of the sound system. Per claims 7, 8, 10, 11, Lee does not disclose having a first and second acoustic reflectors (which are adjustable) to reflect the sound waves from the speakers. Takagi discloses a reflector 25 for the speaker 22 which is used to reflect the sound from speaker to various locations in the vehicle (see figures 3-7). Column 3 lines 37-50 teaches that the stereo reproduction of the sound can be possible according to the position of the passengers. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the apparatus of Lee by including reflectors to reflect the sound from the

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first and second speakers 22, 23, as taught by Takagi, for the purpose of generating an improved stereo sound. Regarding claims 17-19, the modified Lee apparatus, per the teachings of Takagi, disclose a method whereby the first and second speakers direct sound waves towards the passenger compartment via reflections off a windshield.

Claims 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Takagi as applied to claim 17 above, and further in view of Fincham. The combination of Lee and Takagi does not disclose that the first and second speakers are juxtaposed. Fincham discloses a vehicle sound system comprising speaker box 112 having a pair of speakers 114, 115. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Lee to juxtapose the speakers in a speaker, as taught by Fincham, for the purpose of providing a speaker apparatus that can be used irrespective of the vehicle in which it is placed. As to claim 21, Takagi shows that the speaker 22 is in close proximity to the windshield. It would have been obvious to one of ordinary skill in the art at the time of invention to position the speaker there for the purpose of enhancing the ambience of the sound system. Per claims 22 and 23, speakers 32b and 33b are tweeters in figure 6 of Lee. Regarding claim 24, it would have been obvious to one of ordinary skill in the art at the time of invention to install the speakers of Lee flush with the dashboard, as taught by Takagi, for the express purpose of not obstructing the view of the driver and car occupants as would speakers placed on top of the dashboard would do.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (703) 305-9509. The examiner can normally be reached on M-F 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian T. Pendleton
Examiner
Art Unit 2644

BRIAN PENDLETON
PATENT EXAMINER

